

**ABSTRACT OF THE DISCLOSURE****EXECUTING VARIABLE LENGTH INSTRUCTIONS STORED WITHIN A  
PLURALITY OF DISCRETE MEMORY ADDRESS REGIONS**

5           Within a system supporting execution of variable length instructions a program  
is stored within discrete memory regions with a variable length instruction spanning a  
gap between two such discrete memory regions. When execution is attempted of such  
a variable length instruction spanning a gap, an abort handler is initiated which serves  
to copy the end portion of one of the memory regions together with the start portion of  
10   the other memory region into a separate fix-up memory region where these may be  
concatenated such that the whole of the variable length instruction will appear in one  
place. Execution of that variable length instruction from out of the fix-up memory  
region can then be triggered. This execution is constrained by the setting of a single  
step flag which causes the hardware to only execute the single instruction which span  
15   the gap before returning control to a single step exception handler which can then  
restore program flow to the point in the following memory region after the variable  
length instruction which spanned the gap.

[Figure 4]